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(54) **Electrical connector for flat cable and its manufacturing method**

(57) In an electrical connector for a flat cable, a pressure member (15) can freely rotate between an open position to open an inserting space to enable the insertion of the flat cable (C) into an open mouth and a close position to press the flat cable to contact section (12) closing the inserting space. A part of an upper wall (7) of a housing (1) has a opening which is open towards

the open mouth (14). The pressure member (15) can move into the opening when it turns over to the open position, and is supported by a bearing section (11) at a support member held in the housing so as to freely rotate. The upper edge (9A) of the bearing section of the support member is positioned outer than the inner surface of the upper wall of the housing.

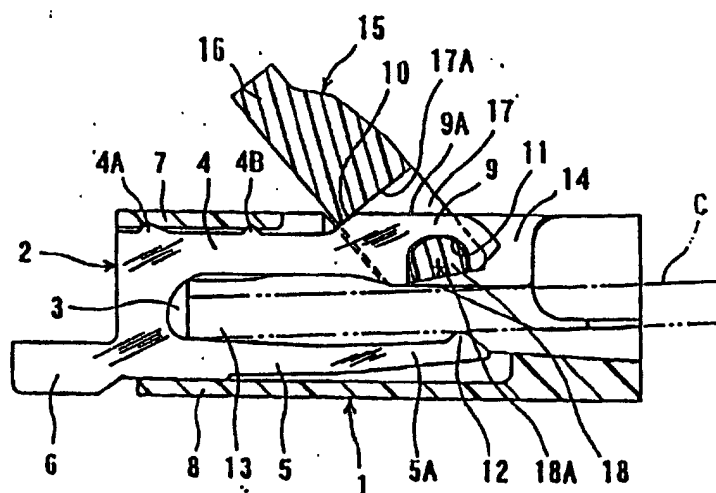


FIG. 1(A)

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EUROPEAN SEARCH REPORT

Application Number
EP 02 00 6110

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	EP 0 618 643 A (HIROSE ELECTRIC CO LTD) 5 October 1994 (1994-10-05)	1,2	H01R12/08
A	* abstract; figures 23-31 * * column 13 * * column 14 * * column 12, line 40-58 *	3-7	
X	EP 0 773 608 A (HIROSE ELECTRIC CO LTD) 14 May 1997 (1997-05-14)	1,2	
A	* column 4; claims; figures 1-4 *	3-7	
A	EP 0 743 715 A (MOLEX INC) 20 November 1996 (1996-11-20) * abstract; claims; figures *	1-7	H01R
A	US 6 171 137 B1 (HATAKEYAMA KENICHI) 9 January 2001 (2001-01-09) * abstract; claims; figures *	1-7	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 30 September 2003	Examiner Durand, F
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 00 6110

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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30-09-2003

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0618643	A	05-10-1994	JP	6077186 U	28-10-1994
			JP	2814447 B2	22-10-1998
			JP	7220829 A	18-08-1995
			JP	2692055 B2	17-12-1997
			JP	7142130 A	02-06-1995
			CA	2120445 A1	03-10-1994
			DE	69426429 D1	25-01-2001
			DE	69426429 T2	23-08-2001
			EP	0618643 A2	05-10-1994
			KR	177716 Y1	15-04-2000
			US	5458506 A	17-10-1995
EP 0773608	A	14-05-1997	JP	3098944 B2	16-10-2000
			JP	9134763 A	20-05-1997
			JP	3064232 B2	12-07-2000
			JP	9283237 A	31-10-1997
			DE	69623724 D1	24-10-2002
			DE	69623724 T2	30-01-2003
			EP	1043806 A2	11-10-2000
			EP	1058350 A2	06-12-2000
			EP	0773608 A2	14-05-1997
			KR	220657 B1	15-09-1999
			US	5904586 A	18-05-1999
			US	5785549 A	28-07-1998
EP 0743715	A	20-11-1996	JP	2824747 B2	18-11-1998
			JP	8321365 A	03-12-1996
			DE	69611320 D1	01-02-2001
			DE	69611320 T2	13-06-2001
			EP	0743715 A2	20-11-1996
			ES	2154362 T3	01-04-2001
			KR	212925 B1	02-08-1999
			SG	66309 A1	20-07-1999
			US	5695360 A	09-12-1997
US 6171137	B1	09-01-2001	JP	3005497 B2	31-01-2000
			JP	10335015 A	18-12-1998